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EXAMINER

DEANE JR, W

ART UNIT

PAPER NUMBER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 9

Application Number: 09/300676

Filing Date: 04/27/199

Appellant(s): Doyle et al.

Jon P. Christensen

For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed May 30, 2000.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellants' statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellants' brief includes a statement that claims stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) *Prior Art of Record*

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

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(10) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 - 38 are rejected under 35 U.S.C. 102. This rejection is set forth in prior Office action, Paper No. 5 and is repeated as follows:

Claims 1 - 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Tonisson.

With respect to claims 1 and 38, Tonisson teaches a method of assigning agents of an automatic call distributor to incoming calls of a plurality of call types handled by the automatic call distributor including the method steps of determining a target occupancy matrix including a target occupancy for each agent of the agents of the ACD for each call type of the plurality of call types and processing a call of a first type of the types determined in the target matrix (Col. 2, lines 15 - 27). Tonisson also teaches assigning the call to an agent of the agents of the ACD with the largest relative difference between an actual occupancy of calls of the first type handled by the agent and the target occupancy of calls of the first type determined for the agent in the target occupancy matrix (Col. 2, lines 27 - 57). More specifically, note Col. 5, lines 11 - 18 of Tonisson. Compare Col. 5, lines 11 - 18 of Tonisson with that of page 7, lines 1 - 8 of the present application. In addition, note the equations from Col. 6 through Col. 9 and the description thereof with respect to providing a matrix including agent skills, call types etc.

With respect to claims 2 - 4, note the use of permanent data, semi-permanent data and variable data (Col. 2 - Col. 3, lines 49 - 44). Also note use of Erlang at Col. 6, line 15.

With respect to claim 5, a minimum skill level is inherent in Tonisson.

With respect to claims 6 - 13, note Cols. 3 - 4, lines 36 - 46.

With respect to claims 7 - 10, note the Summary of the invention.

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With respect to claims 11 - 13, see Col. 4 lines 36 - 52

With respect to claims 14 - 26, these claims parallel claims 1 - 13 and the arguments would be the same as those discussed supra.

With respect to claims 27 - 37, Tonisson teaches applicant's device and the arguments would parallel the arguments above. Note ACD 101, call processor 110, matrix processor 150.

(11) Response to Argument

Applicants' first argument is that "in order for a call to be assigned to an agent with a largest relative difference between an actual occupancy and a target occupancy, a comparison would necessarily have to be performed in the case of each call. Applicants states that "it is not believed that Tonisson contains such a teaching." First, no such comparison step is recited in the pending claims. Second, even if such a comparison step was included in the pending claims such a comparison step would still read on the claims as presently presented. Tonisson teaches assigning a call to an agent with a relative difference between an actual occupancy and a target occupancy (see Col. 2, lines 27 - 57 and more specifically Col. 5, lines 11 - 18 and Col. 4. Lines 44 - 60). With respect to the comparison step (not recited in the claims), such is also taught by Tonisson. Note call vector 140 and call queues 120. At Col. 4, lines 13 - 16, it states "Calls incoming to the call center on lines or trunks 100 are assigned by call vector 140 to different call queues 121 - 129 based upon the agent skill that they require for their prompt handling." At Col.5. lines 30 - 36, Tonisson states " As agents become available, if there is a call available in one of the call queues corresponding to a skill that the agent is logged into, the first call is taken from one of the call queues and is passed to the agent. It is assumed that the ACD is capable of

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distributing calls in such away that a fixed proportion of the agent's workload -either time or number of calls handled -can be allocated to each skill."

Now, applicants contend that Tonisson only teaches logging an agent into and out of a skill queue. The Examiner disagrees. It is true that Tonisson teaches logging an agent into and out of a skills. However, this logging into and out of a skill is based on, as discussed above, the difference between an actual occupancy and target occupancy. Therefore, if the agent is logged into and out of a skill based on the difference between an actual occupancy and a target occupancy and if calls assigned to an agent are based upon agent skill, then inherently, the call is assigned based on the difference between an actual occupancy and target occupancy.

For example, agent 1 is assigned skills 1 and 3 and agent 2 is assigned skills 2 and 3. Let's say that agent 1 meets the target occupancy for skill 3 and is reassigned to receive calls relating to skill 4. Now calls that were to be sent to agent 1 relating to skill 3 will not be sent to agent 1 but will be vectored to agent 2 based on the basis of the difference between agent 2's actual occupancy and target occupancy. Calls now related to skill 4 will be vectored to agent 1 based on its difference between actual and target occupancy for this call type.

With respect applicants' comments on page 4 of the Brief, the examiner agrees that the agents call handling priorities are changed. But, if the agent's call handling priorities are changed then inherently the call assignments will change as discussed above. In other words, as discussed above, once agent 1 meets the target occupancy, calls initially assigned to agent 1 will have to be sent to another agent which accepts the same call type as agent 1 but who has not reached his target occupancy.

In addition, on page 4, applicants state "A person of skill in the art would understand the phrase "adjusts the agents' call handling priorities" to suggest a

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parametric change to a call handling vector. It would not be understood to mean a direct comparison between an actual occupancy of calls and a target occupancy and assignment of calls based thereon.” Applicants apparently admit here that Tonisson does teach a comparison between an actual occupancy of calls and a target occupancy and assignment of calls based thereon. Obviously, applicants problem is not that there is no teaching of a comparison between an actual occupancy and a target occupancy and assignment of calls based thereon but rather that there is no direct comparison. First, no such language exists in the claims. Second, even if a phrase such as “direct comparison” were incorporated with regard to the actual and target occupancy and assignment of calls, the examiner would still hold that Tonisson teaches such a limitation.

In short, basically applicants are correct in their selected and partial interpretation of Tonisson. However, they conveniently do not discuss call vector 140 and the call queues 120 shown in Fig. 1 which combined with other teachings throughout the specification, as noted above, read on the claims as currently presented.

With respect to applicants’ comment found on page 6, involving the Advisory Action the examiner admits a slight oversight. Applicants are concerned with the statement “Giving Tonisson the broadest interpretation it is believed that such assigning of calls is taught by Tonisson.” Obviously, after the word “by” the examiner intended that the phrase -- the claims of -- be inserted. If one excepts applicants’ view of the situation, the sentence could have ended after the word “taught”. As is, the sentence is not grammatically correct. In other words, the use of “Tonisson” twice as written puts one on notice that something is missing. The correct standard for the 102 rejection in both the 1st and final action was used.

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With respect to applicants' comments found on page 7, such questions are meant to be rhetorical and not questions revealing a lack of uncertainty on the examiners part.

Also found on page 7, applicants state that Tonisson does not teach an actual occupancy or a target occupancy. As broadly claimed by applicant, such would read on the actual $R_{s,a}$ and optimum $R_{s,a}$ respectively.

With respect applicants' comments on page 8, regarding matrices. Apparently, applicants believe that processing calls one at a time makes a matrix but processing agents one at a time does not. This logic escapes the examiner but, since as discussed above Tonisson does process calls one at a time applicants should be satisfied that a matrix exists. In addition, a through reading of Tonisson describes the same matrices as shown on page 6 of the present application. Note, that as stated above, that Tonisson teaches a target matrix having a target for the call center (optimum $R_{s,a}$), multiple agents having target occupancy for multiple work types (see also Col. 4, lines 44 - 49). It is not understood how one could read Tonisson and then read page 5, last paragraph - the end of page six of the present application and not see that Tonisson teaches both an occupancy and target matrices.

With regard to the comments found on pages 8 - 9, suggesting that all the elements have not be shown, the examiner has consistently shown that all the elements are contained in the Tonisson reference as evidenced by both the earlier Office Actions.

In conclusion, the examiner has shown that the claims as recited do read on the Tonisson reference. Applicants' willingness to over look the obvious and the inherent limitations found in the Tonisson reference have placed this application before the Board.

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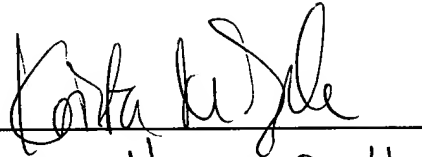
For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

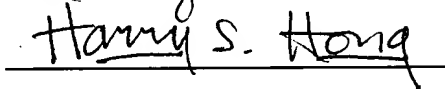
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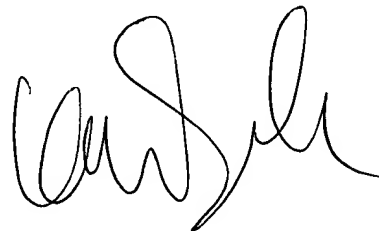
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